

**13. BASIC FUNTION:**

Under the supervision of the Facility Manager, the Facilities Engineer is responsible, along with the Facility Manager, for all the Government owned and leased facilities operations, maintaining and repair of the U.S. Consulate's Mechanical and Electrical Systems such as Chiller Plant, Air Handling Units, VAV System, Potable Water, Sanitary Sewage and Oil Water Separator Systems. Responsibilities also include, Electrical Power Distribution Systems; Voltage Regulators; Transformers; Switchgear; Automatic Transfer Switches; Variable Frequency Drives (VFD); and Uninterruptible Power Supply (UPS) Systems. Responsibilities also include supervision of post's maintenance staff that maintains all mechanical and electrical systems throughout the Consulate's buildings and grounds.

Employed as an Engineer to assist in the management of preventative maintenance and repair work throughout the New Consulate Compound (NCC) buildings, grounds and residential owned/leased properties. Work assignments will be directed by the Facility. Assists with responses to both written and verbal requests for maintenance services and ascertains all of the necessary information to determine whether the work is of a routine or emergency nature. In-depth knowledge of general mechanical and electrical building systems is required.

**14. MAJOR DUTIES AND RESPONSIBILITIES**

**% OF TIME**

**Maintenance Program**

**50%**

Serves as an expert in planning, organizing and maintaining large and complex mechanical and electrical systems and equipment, such as Building Automation Systems and Controls, Emergency Power Generation with distribution and HVAC systems. Solves mechanical and electrical problems to increase mechanical and electrical systems efficiency at the Consulate. Assists with the estimation of future maintenance costs and potential savings; formulates recommended mechanical projects and assists the Facility Manager with future project and annual budget projections.

Assists in maintaining a reliability-centered maintenance program by directing facility maintenance staff and/or monitoring contracted service providers, for equipment, systems and controls. Maintains; monitors; troubleshoots; configures; identifies; isolates and corrects faults; performs diagnostic tests; ensures the proper operations of designated equipment and systems. Prepares reports to document and monitor the operation of equipment with systems and reports status to the Facility Manager. In the absence of the Facility Manager may serve as acting Facility Manager, as delegated.

**Operations support**

**15%**

Provides budget input for operating, maintenance and repair costs to include all tools, special equipment and spare parts required to maintain systems within designed operational performance requirements and within operating budget limits. Assists the Facility Manager in briefing post management on work and project status. Attends staff

meetings, as delegated, to provide justifications for project and maintenance requirements.

**Program support**

**10%**

Assists in maintaining post's maintenance management system in conjunction with post's WOW Clerk to ensure that planned preventative service events and unscheduled events are recorded as completed. Assists with the management and maintenance of the technical data containing in WOW consisting of as-built documents (plans and specifications), maintenance manuals, manufacturer's data sheets, list of spare parts and tools, manufacturer's and supplier's contact data, and warranty information on equipment and systems.

**Contracting Officer's Representative COR**

**10%**

Assists with the development and monitoring of contract procurement documents which include: written scopes of work, construction drawings, specifications, bill of materials, and independent government cost estimates for minor maintenance, repair and alteration projects. Assists in analysis of contractor's bid proposals for technical accuracy and provides recommendations as to the contractor's ability to perform work. Serves as a Contracting Officer's Representative (COR) or as Government Technical Monitor (GTM) for contracts, as delegated, to monitor contractor's work performance for products and services per contract requirements. Additional duties include the following: development of acceptance reports; punch lists management; and quality control inspections with tests as required.

**Safety program**

**10%**

Assists Post's Occupation Safety Officer and Health (OSHO) by contributing to the safety program by conducting inspections of government owned and leased facilities to ensure compliance to DOS safety and wellness requirements. Develops deficiency reports with recommendations for solutions along with independent government cost estimates. Performs inspections of safety repairs for compliance with DOS requirements to ensure work does not present health problems or risk of injury to mission staff, contract workers or visitors to the facility.

Other duties as assigned and backup for Facilities Manager if needed

**5%**

**15. QUALIFICATIONS REQUIRED:**

- A. **Education:** Completion of a 4-year Bachelor of Science degree, or equivalent, in Mechanical, Electrical or Civil Engineering from an accredited university program.
- B. **Prior Work Experience:** Minimum of five years of progressive experience working as a project manager/supervisor at a manufacturing plant, major resort, hospital, office complex or a large university/school system. Managing preventative maintenance programs and the operation of a computerized maintenance management system. (Knowledge of building codes and industry

construction standards. Experience in developing scopes of work, construction documents (plans and specifications) and cost estimates for repairs, equipment replacement and new construction. Ability to use computer aided design drafting programs (e.g. AutoCad), to develop and manipulate drawings and details. Position requires at least 2-years of supervisory or managerial experience managing between 3 to 10 employees, contracts and projects.

- C. **Post Entry Training:** Position may require individual to travel TDY for the purpose of receiving on the job training to become familiar with mission maintenance operations. Must have basic understanding of the Department of State contracting procedures in order to develop contract packages for solicitation and responsibilities of performing Contracting Officers Representative, COR/GTM duties. Must complete the 40 hour Contracting Officers Representative, COR training course before the candidate can assume duties as a COR/GTM. Additional available training includes the following:

FSI (Foreign Service Institute)/On Site:

PA178 Contracting Officer's Representative (COR)

PA313 Effective Operational Management

PA521 Facility Manager Tradecraft

PA522 Building Automation Systems

PA523 HVAC Building Automation Fundamentals for Building Managers

PA524 Electrical Power Generation for Facility Managers

PA525 Overseas Facilities Management

Distance Learning:

PA296 - How to be a Contracting Officer's Representative

PA438 - Web.PASS Work Order for Windows

PA526 - ProjNet SM Facilitating Design and Construction Communication

- D. **Language Proficiency:** Level III (good working knowledge) written/spoken English and level IV (Fluent) written/spoken Spanish are required.
- E. **Job Knowledge:** Must have an excellent knowledge of HVAC, chillers, electrical distribution, voltage regulation, automatic transfer switches, and general building mechanical and electrical systems. Be well versed of established mechanical and electrical codes, trade practices and the ability to supervise and manage a medium size maintenance staff and programs, and possess thorough knowledge of international building codes and industry and local construction standards Proficient in the use of MS Office software (Word, Excel, Power Point etc) AutoCad and other special computer programs required for this position.
- F. **Skills and Abilities:** The incumbent shall have the ability and skills in the following areas:
- work independently and unsupervised by the Facility Manager;
  - serve as acting Facility Manager as delegated;

- develop and manage work plans and distribution work assignments to facility maintenance personnel;
- assists in the management of a preventative maintenance programs and operation of a computerized maintenance management system;
- assists with the development of statements of work, perform feasibility studies for proposed projects, construction documents (plans and specifications), and cost estimates;
- maintains inventory of critical spare parts and specialized tools for equipment and systems;
- assists in developing annual budgets, responses to DOS requests for facility data, and tracking of unscheduled maintenance issues;
- Must be able to work unsupervised and may be called upon to perform the duties of Acting Facility Manager during the absence of the Facility Manager.
- ability to read and understand mechanical layout drawings, undertake feasibility studies and write detailed technical reports is a must for this position; .

**16. POSITION ELEMENTS:**

- A. **Supervision Received:** Incumbent is directly supervised by the Facility Manager. When the Facility Manager is absent from post, the incumbent may be delegated to the role of acting Facility Manager, who would then report directly to the Management Officer.
- B. **Supervision Exercised:** Supervises a staff of up to 10 individuals in the management of the day-to-day facility preventative maintenance program and execution of multiple repair/improvement projects.
- C. **Available Guidelines:** Department of State rules and regulations including the Foreign Affairs Manual (FAM), manufactures technical library, as-built building drawings and plans, equipment maintenance plans, and OBO technical guidelines including the Work Orders for Windows Training Guide.
- D. **Exercise Judgment:** Expected to use professional knowledge and know how to perform work required in a timely manner for the benefit of the Facility and Maintenance.
- E. **Authority to Make Commitments:** Limited to tasks assigned by determining appropriate methods for repairs and performing maintenance. Determines and implements safe working procedures and environment for a mission personnel, contractors and visitors. Limited to assigned task by the Facility Manager and/or Contracting Officer on material and equipment selections for contacts.
- F. **Nature, Level and Purpose of Contacts:** A. Interacts with staff supervisors, technicians, customers and if assigned, provides quality assurance of service

**Position No. A51-200**

**Position Name: Facilities Engineer**  
**Name: Vacant**

contractors and vendors. Local Government/Municipal authorities as directed by the Facility Manager.

G. **Time Expected to Reach Full Performance Level:** Six months.